



FOURTH EXPLANATION OF SIGNIFICANT DIFFERENCES

for the

L.A. Clarke and Son Superfund Site

I. INTRODUCTION

Site Name: L. A. Clarke and Son Superfund Site (Site)
Site Location: Massaponax, Spotsylvania County, Virginia
Lead Agency: U.S. Environmental Protection Agency, Region III (EPA)
Support Agency: Virginia Department of Environmental Quality (VDEQ)

II. STATEMENT OF PURPOSE

This Fourth Explanation of Significant Differences (ESD) modifies the remedy originally selected for the L. A. Clarke and Son Site (Site), located in Spotsylvania County, Virginia. This ESD revises the surface soil clean-up levels (human health and ecological); revises the institutional controls (ICs) necessary to ensure long-term protectiveness at the Site; clarifies the requirement to address site security through fencing and signage to limit access and warn the public as a component of the selected remedy; and eliminates the requirement for a soil cover.

EPA is issuing this ESD in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. § 9617(c), and 40 C.F.R. § 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP requires an ESD when modifications to the remedial action selected in a Record of Decision are necessary, and such modifications significantly change, but do not fundamentally alter, the remedial action with respect to scope, performance, or cost.

This ESD summarizes the information that supports these modifications and confirms that the remedial action, as revised by these modifications, will continue to comply with the statutory requirements of Section 121 of CERCLA, 42 U.S.C. § 9621.

The proposed ESD and Administrative Record were available for public review at the locations listed below during the 30-day public comment period (August 21, 2015 to September 21, 2015) that preceded issuance of this ESD. The Administrative Record contains information EPA relied upon or considered in issuing this ESD. No significant changes were made to the ESD in response to public comment.

III. SUMMARY OF SITE CHARACTERISTICS AND SITE HISTORY

Site Characteristics

The 40-acre Site, located in Spotsylvania County approximately 4.5 miles southeast of Fredericksburg, is just east of Route 608 and Route 17 (See attached Figure 1). Figure 2 (also attached) identifies the approximate boundaries of the upland portion of the Site (the area affected by this ESD), the location of railroad lines, Westvaco Pond, and Massaponax Creek and its floodplain. The upland portion of the Site, also known as the terrace, is composed of two tracts separated by the CSX railroad siding, as shown on Figure 2. The former wood treatment plant was located on the west side of the northern tract and the wastewater impoundment was located on the west side of the southern tract. The east side of the terrace was used for wood drying and storage.

The Site lies within the uplands section of the Coastal Plain physiographic province. The topography of the terrace is generally flat, with elevations ranging from 55 to 65 feet above mean sea level. At the southern boundary of the terrace is a steep slope that terminates at the Massaponax Creek floodplain, which is approximately ten feet lower in elevation. Surface runoff from the terrace flows into a series of drainage ditches which discharge into the floodplain of Massaponax Creek, a wetland area. Ground water at the Site also discharges to the drainage ditches, and generally flows in a southeasterly direction within four water-bearing zones.

Water from the wetlands flows through several tributaries to Massaponax Creek, which discharges into Ruffins Pond approximately two miles downstream. Westvaco Pond lies immediately west of the terrace.

Site History

Wood preserving operations occurred at the Site from 1937 to 1988, except for one inactive period from April 1979 to June 1980. L. A. Clarke and Son, Inc. (L.A. Clarke) operated the facility on the property from 1937 to 1988. L. A. Clarke leased the property from the Richmond, Fredericksburg & Potomac Railroad (RF&P) until 1976 when the Clarke family bought the property. In 1980, the Clarke family sold the property to the Curtas family, who then operated the facility on the property until it closed in 1988. The property was reacquired by RF&P in 1992. RF&P has since been sold to Commonwealth Atlantic Properties, with the work at the Site being performed by a subsidiary, Commonwealth Atlantic-Spotsylvania Inc. (hereinafter, collectively, CASI) pursuant to a 1989 Consent Decree with the United States, entered under Sections 104, 106, 107, and 113(g)(2) of CERCLA, 42 U.S.C. §§ 9604, 9606, 9607, and 9613(g)(2) (the 1989 Consent Decree), and a 1995 Administrative Order on Consent which EPA issued under Sections 106(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a).

Railroad ties, telephone poles, and fence posts were preserved at the wood treatment plant by injecting them with a mixture of creosote and coal tar in a sealed compartment under high temperature and pressure. EPA identified contaminants commonly associated with creosote and coal tar at the Site. On May 20, 1986, EPA listed the Site on the National Priorities List pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, 51 Fed. Reg. 21078 (May 20, 1986).

IV. DESCRIPTION OF SELECTED REMEDY AND REMEDY IMPLEMENTATION

Selected Remedy

EPA selected a remedy for the Site in a Record of Decision (ROD) dated March 31, 1988, based on a Remedial Investigation (RI) and Feasibility Study (FS). EPA identified polycyclic aromatic hydrocarbons (PAHs) and benzene as contaminants of concern (COCs) for surface soils and sediments at the Site. The ROD noted that the FS focused on the development of remedial alternatives designed to control contaminant sources identified during the RI, and that further RI/FS work would be undertaken to further study and address impacted ground water and sediments (apart from sediments that were to be addressed under that ROD). In the 1988 ROD EPA selected Alternative 3 from the RI/FS, which contained the following major components:

- On site treatment of identified contaminated soil and sediment, including:
 - Contaminated soils beneath the then-existing process buildings to be addressed via in-situ flushing with a surfactant solution followed by in-situ bioreclamation,
 - All other contaminated surface soils, sediments (including ditches 1, 2, and 3 and wetlands), buried pit materials, and subsurface wetlands soils to be addressed via on-site landfarming;
- The total amount of soil and sediments estimated to be treated at the time of the ROD was approximately 119,000 cubic yards;
- Backfilling of excavated areas with treated soil and sediment. Cover backfilled areas with 1.5 feet of topsoil and revegetate;
- Biological treatment of the soil pile regulated under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 *et seq.*, via land treatment in place;
- Biological treatment of excavated sludge from the wastewater impoundment (K001 RCRA-listed hazardous waste) in a tank, followed by onsite land disposal;
- Implementation of ICs necessary to maintain protectiveness of the remedy after remedial action; and
- Ground water monitoring during and post treatment.

After issuing the ROD, EPA determined that changes to the remedy were necessary, initially prompted by the cessation of wood treatment operations at the Site. EPA classified these changes as Significant Differences which did not fundamentally alter the overall approach intended by the selected remedy and therefore did not require an amendment to the ROD (40 C.F.R. § 300.435(c)(2)(i)). These modifications were documented in three Explanations of Significant Differences (ESDs) for the Site, as listed below.

On December 29, 1989, EPA issued the first ESD, which provided for the removal of the onsite process buildings and associated appurtenances. With respect to soils beneath the process buildings, in the 1988 ROD EPA had selected in-situ soil flushing followed by bioremediation.

The ROD further provided that should the on-site process buildings be removed, Alternative 4 would be selected. Alternative 4 is identical to Alternative 3 except that, with absence of the buildings, contaminated soils beneath the former process buildings were to be subject to the same remedy selected for other site soils and sediments at the Site.

On March 31, 1994, EPA issued a second ESD to revise the disposal method for the sludge in the wastewater impoundment. Because sludge from wood treating operations is a listed hazardous waste under RCRA (K001), it was required to meet the RCRA Land Disposal Restrictions (LDRs) prior to disposal. It was not known at the time of the ROD that biological treatment in a tank (the remedy selected in the ROD) could not meet these requirements. As a result, in the 1994 ESD EPA changed the selected remedy to provide for off-site incineration for the sludge. Incineration was (and is) the Best Demonstrated Available Technology for K001 wastes.

On June 14, 1999, EPA issued a third ESD to change the selected remedy for the floodplain and drainage ditch sediments from biological treatment via on-site landfarming to off-site disposal in a landfill, in conformance with RCRA LDRs.

Remedy Implementation

EPA has organized the Site into five operable units (OUs). As detailed below, the first four OUs concern areas whose cleanup is addressed under the original 1988 ROD and subsequent ESDs. OU-5 comprises ground water, surface water, and sediments that were not otherwise finally addressed in the 1988 ROD.

OU-1, Site security, was the first part of the Site addressed under the 1988 ROD. A fence was placed around the Site, except where the railroad exits and enters the Site boundary. Warning signs were placed at the Site boundaries to deter trespassers from entering and risking contact/exposure to any of the COCs. This work was completed in September 1989 and continues to be protective. However, addressing site security through fencing and signage was not formally identified as a component of the selected remedy in the 1988 ROD and this ESD memorializes that requirement.

OU-2, demolition and decontamination, was undertaken in accord with ESDs Nos. 1 and 2. This work consisted of demolishing the former wood treatment facility; decommissioning the former wastewater impoundment; removing and off-site treatment and disposal of surface water, emulsion, and sludge in the wastewater impoundment; and excavating and off-site disposal of the contaminated soil underlying the surface impoundment at the Site. This work was performed over several years by CASI. Demolition of the wood treatment facility was completed in 1993. Disposal of other wastes and debris at the Site was completed in 1995. Removal of the wastewater in the impoundment occurred in January 1995, removal of the liner occurred in June 1995, and excavation and offsite disposal of the underlying contaminated soil from the wastewater impoundment occurred in February, 1997.

Work to address OU-3, site water controls, was not implemented. The purpose of this operable unit was to investigate the feasibility of minimizing the amount of storm water running

onto the Site. However, EPA ultimately determined that storm water controls were not feasible at the Site.

To date, CASI has partially implemented work to address OU-4, site soils and sediments. Contaminated sediments which exceeded the site-specific PAH cleanup level were excavated from portions of the drainage ditches and floodplain areas and disposed of off-site. This work was completed in 2001. As noted above, ground water in the terrace area in part discharges to the drainage ditches, which then discharges to the floodplain. EPA directed CASI to re-sample the excavated areas to determine if soil and sediments have been re-contaminated with contaminated groundwater discharge. This sampling, which occurred in the summer of 2012, identified several areas at which the site-specific cleanup level were exceeded and require further remediation. These re-contaminated areas will be addressed in the future. To date, the only surface soils that have been excavated at the Site are those which were removed during the demolition of the former wood treating facility and the surface impoundment. Additionally, sediments in the ditches and floodplain have been removed. The surface soils in the terrace area of the Site are the subject of this ESD and are explained in detail below.

Work necessary to address OU-5 -- ground water, surface water and sediments not otherwise finally addressed in the 1988 ROD -- will be addressed in a future ROD.

V. DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE BASIS FOR SUCH DIFFERENCES

EPA is issuing this ESD for the following four reasons.

1. To change the human health cleanup level for certain surface soils (soils at a depth of less than 18 inches below ground surface (BGS) thus negating the need for a soil cover,
2. To institute an ecological cleanup level for certain surface soils (soils at a depth of less than 6 inches BGS),
3. To ensure ICs necessary for long-term protectiveness are implemented through a covenant under Virginia's Uniform Environmental Covenants Act, rather than deed restrictions that were called for under the 1988 ROD, and;
4. To further confirm adequate Site security by documenting the requirement for installation of fencing and signage in accordance with the 1988 ROD.

Surface soils -- human health

The 1989 Consent Decree contains a provision allowing CASI to petition EPA to change the human health soil cleanup level identified in the ROD. After reviewing information in a petition submitted by CASI, EPA has determined that a change in the human health surface soil cleanup level at the Site for incidental ingestion and dermal contact is appropriate, for the following reasons:

- More recent science allows distinguishing the separate risk posed by individual PAHs,

- The future re-use scenario of the Site has changed since the issuance of the 1988 ROD, and
- There are more sophisticated methods now available to perform risk assessments.

These reasons are described in detail below.

Most of the COCs at the Site are PAHs, a group of semi-volatile compounds that are now known to have varying levels of toxicity. However, when the ROD was issued, all of the PAHs were assumed to have the same level of toxicity as that of benzo(a)pyrene, the most toxic of the PAHs. Since then, EPA determined and documented in relevant literature the toxicity for each of the PAHs. These toxicities differ by orders of magnitude. For example, benzo(a)pyrene is just as toxic as dibenz(a,h)anthracene, but both are ten times more toxic than benzo(a)anthracene and a thousand times more toxic than chrysene, which is one of the least toxic PAHs. The revised cleanup level is now based on benzo(a)pyrene equivalent factors; that is, EPA assessed each of the PAHs relative to the toxicity posed by benzo(a)pyrene. By using benzo(a)pyrene equivalents, EPA has been able to more accurately assess the risks posed to human health from total PAHs at the Site.

The 1988 ROD identified two future use exposure scenarios for the Site: residential and on-site workers. EPA based the human health risk assessment on the residential future use scenario at that time of the 1988 ROD because it was (and still is) the most conservative scenario. The on-site worker was also evaluated because the facility's wood treatment operations were still active when the ROD was written. Therefore, the ROD contained two cleanup levels for PAHs in surface soil (soils at a depth of less than 18 inches): 0.08 mg/kg based on a residential future use scenario and 0.22 mg/kg for protection of on-site workers, both based on achieving a 1E-06 risk level. The 1988 ROD also called for placement of a 1.5-foot layer of topsoil over excavated areas backfilled with treated soil and sediment. However, EPA is revising the future use scenario for the Site based on CASI's intended future use of the property. The Site owners envision future use at the Site as commercial or industrial activities only. EPA acknowledges that this classification is the most likely future use scenario given the location and setting of the Site and the presence of the railroad spur, which cuts through the property. CASI is willing to place ICs on the Site property to restrict the future use of the Site to these uses.

Finally, CASI performed a probabilistic risk assessment (PRA) to determine the human health cleanup level for surface soil at the Site. In general, PRA incorporates variability and uncertainty into assessments in order to estimate the range and likelihood of a hazard, exposure, or risk. In contrast, traditional risk assessments and cleanup levels rely only on single exposure values (rather than distributions) to generate outputs, such as a soil cleanup concentration. PRA (sometimes referred to as Monte Carlo simulation) allows for a more robust cleanup goal by taking into account the range of possible values for each of the exposure parameters.

By incorporating benzo(a)pyrene toxicity equivalent factors (TEFs), a non-residential and non-recreational future use scenario, and the Monte Carlo simulation, into the human health risk assessment for soil, the new human health cleanup level for surface soil at the Site was calculated to be 60 mg/kg carcinogenic PAH benzo(a)pyrene toxic equivalence quotient (TEQs) as a site average. See Weinberg Consulting Group submission regarding soil cleanup levels

(April 22, 1994); Memorandum from Nancy Rios Jafolla to John Banks, *LA Clarke Superfund Site, Review of Soil Cleanup Level for ESD/5 Year Review* (April 15, 2004). This cleanup level equates to a 5.0E-05 risk level for categories of workers most likely to be exposed to surface soil contaminants (operator, fabricator, and laborer labor classification worker) and is within the acceptable risk range included in the NCP. See 40 C.F.R. 300.430(e)(2)(i)(A)(2), *Role of Baseline Risk Assessment in Superfund Remedy Selection Decisions*, OSWER Directive 9355.0-30 (April 22, 1991). Since the new surface soil cleanup level is protective of these workers, and the level of contamination in existing soils meets this criteria, EPA is removing the requirement for placement of 1.5 feet of clean soil.

Surface soils – ecological risk

The process for conducting ecological risk assessments has developed and been updated since the date of the ROD. Because the ROD did not contain an ecological cleanup level for surface soil, EPA is also adopting an ecological cleanup level in soils of 6 inches BGS of 50 mg/kg total PAHs as a site-wide average, with a not-to-exceed value of 100 mg/kg total PAHs. This ecological cleanup level reflects soil-based ecological exposures as well as exposures based upon migration to aquatic areas. See Memorandum from Bruce Pluta to Andy Palestini, *L.A. Clarke Potential Target Upland Soil Removal Values* (Nov. 2, 2011).

Institutional Controls

The third reason EPA is issuing this ESD is to revise and more specifically describe how ICs will be implemented at the Site. ICs are non-engineering measures, usually legal controls, intended to limit human activity in such a way as to ensure the continued prevention of exposure to hazardous substances. Since hazardous substances will remain in the Site surface soil and ground water at levels which do not allow for unlimited use and unrestricted exposure, ICs were and will be necessary to assure long-term protectiveness, taking into account expected future land use. The 1988 ROD provided that ICs would be developed in the future. Subsequent to EPA's issuance of the ROD, wood treatment operations were discontinued at the Site, and all operations buildings were demolished and removed. Additionally, Virginia has enacted the Uniform Environmental Covenants Act (UECA), § 10.1-1238 *et seq.*, which provides a comprehensive legal tool to ensure that all required ICs are implemented at sites.

This ESD modifies the remedy selected in the 1988 ROD to specify the ICs that are necessary to ensure that the Site will be protective of human health.

Specifically, the ICs at the Site shall:

1. Prohibit residential use or use as a school, childcare facility, playground or for other outdoor recreational activity;
2. Require the then-current owner to limit use or development of the property to commercial/industrial uses consistent with the worker exposure scenarios contemplated in the human health risk assessment used to determine the surface soil cleanup levels;

3. Require the then-current owner of the Site property to prepare and implement a health and safety plan, developed by a professional engineer or certified industrial hygienist, prior to any earth-moving activities, including excavation, drilling and construction, on the Site property;
4. Require the then-current owner of the Site property to prepare and implement a soils management plan that will address any soils generated from earth-moving activities, including excavation, drilling and construction, on the Site property at or below 18 inches in depth. The soils management plan shall ensure that any excavated soils are managed in such a way so as to ensure surface soil cleanup levels identified above are maintained throughout the Site property and any excavated soils removed from the Site property are properly characterized to ensure the disposition of any soils is consistent with the then-applicable State and Federal law.
5. Require the current and future owners of the Site property to incorporate these land use restrictions into any real property documents necessary for transferring ownership, in the event of sale or transfer of any property rights related to the Site property. The real property document would include a discussion of the NPL status of this Site, as well as a description of all contamination and types of worker exposure scenarios that were contemplated in the risk assessment used to develop the surface soil cleanup levels for the Site;
6. Require the then-current owner of the Site property to notify EPA in writing at least 60 days prior to a sale or transfer of any property rights relating to the Site property;
7. Require the then-current owner of the Site property to inspect the Site property and report on the status of such ICs. A status report shall be prepared and submitted for EPA's review on at least an annual basis or such time agreed upon by EPA in consultation with VDEQ;
8. Require the then-current owner of the Site property to immediately take steps to halt any activities which violate these ICs and to notify EPA of such violations.

The ICs described above shall run with the land and shall be set forth in a UECA covenant to be recorded by CASI against all of its rights, title and interest to the Site property. The UECA covenant shall be recorded at such time as EPA determines is appropriate.

Site Security

The fourth reason EPA is issuing this ESD is to confirm that the fencing and signage at the Site that was accomplished during the actions taken in 1989 is maintained to address the Site security component of the remedy selected in the 1988 ROD. Maintaining the fence and signage will limit access to the Site to ensure no unacceptable human exposure to contaminants of concern in Site soils occurs and to ensure all other components of the remedy are safe guarded.

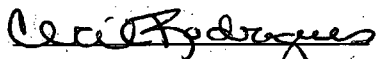
These modifications to the remedy do not fundamentally alter the basic features of the remedy previously selected with respect to scope, performance, or cost. The remedy for the surface soil in the terrace area remains landfarming. The modifications change the surface soil cleanup level, specify the ICs at the Site that are necessary to protect future workers as specified

The Administrative Record file is also available online at:
http://loggerhead.epa.gov/arweb/public/search_results.jsp?siteid=VAD071040752

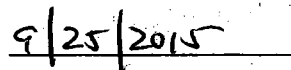
IX. SIGNATURE

This Explanation of Significant Differences modifies the selected remedy set forth in the 1988 ROD and previous ESDs for the L. A. Clarke and Son Superfund Site by revising the surface soil clean-up level; eliminating the requirement for a soil cover; revising the institutional controls and implementation mechanism necessary to ensure long-term protectiveness at the Site; and clarifying the requirement to address site security through fencing and signage.

Approved By:



Cecil Rodrigues, Director
Hazardous Site Cleanup Division
EPA Region III



Date

above and prevent residential or recreational use of the Site, remove the requirement for a 1.5-foot layer of clean soil, and identify fencing and signage to address Site security as a component of the remedy selected in the 1988 ROD. These changes enhance the long-term effectiveness of the remedy by providing greater assurance that the remediation strategy implemented at the Site will not be compromised by unacceptable land uses. EPA has determined that modifications to the remedy requiring the ICs and new performance standards discussed above are consistent with future land use and will ensure the protection of human health and the environment.

VI. SUPPORT AGENCY COMMENTS

Pursuant to 40 C.F.R. § 300.435(c)(2), EPA has coordinated with VDEQ with respect to the changes that this ESD makes to the remedy set forth in the ROD and the previous ESDs. VDEQ supports the modifications and has provided a letter of concurrence dated September 22, 2015. (See Attachment 1.)

VII. STATUTORY DETERMINATIONS

EPA has determined that the remedy selected in the ROD, the previous ESDs and this ESD complies with the statutory requirements of Section 121 of CERCLA, 42 U.S.C. § 9621. EPA has determined that the remedy set forth in the ROD and ESDs, as revised by this fourth ESD, will remain protective of human health and the environment and will meet the Federal and State requirements that are applicable or relevant and appropriate to the remedy.

VIII. COMMUNITY INVOLVEMENT

In accordance with Sections 300.435(c)(2)(i)(A) and 300.825(a)(2) of the NCP, 40 C.F.R. § 300.435(c)(2)(i)(A) and 300.825(a)(2), this ESD and all documents that form the basis for the decision to modify the remedy are being added to the Administrative Record file for the Site. In accordance with Section 117(c) and (d) of CERCLA, 42 U.S.C. § 9617(c) and (d) and Section 300.435(c)(2)(i)(B) of the NCP, EPA published a "Notice of Availability" for this ESD in the Fredericksburg Freelance Star newspaper on Friday, August 21, 2015. (See Attachment 2.) The ad solicited comments on the draft ESD during the comment period identified as closing on midnight, September 21, 2015. No public comments were received during the comment period.

The Administrative Record file is available for public review on computers at the locations listed below:

U.S EPA, Region III
6th floor Docket Room
Attn: Paul Van Reed
1650 Arch Street
Philadelphia, PA 19103
(215) 814-3157

Hours:
Monday - Friday 8:00 am – 4:00 pm

Spotsylvania County Administrator's Office
9104 Courthouse Road
Spotsylvania, VA 22553
(540) 507-7010

Hours:
Monday - Friday 8:00 am – 4:30 pm

**FIGURES
AND
ATTACHMENTS**

Figure 1

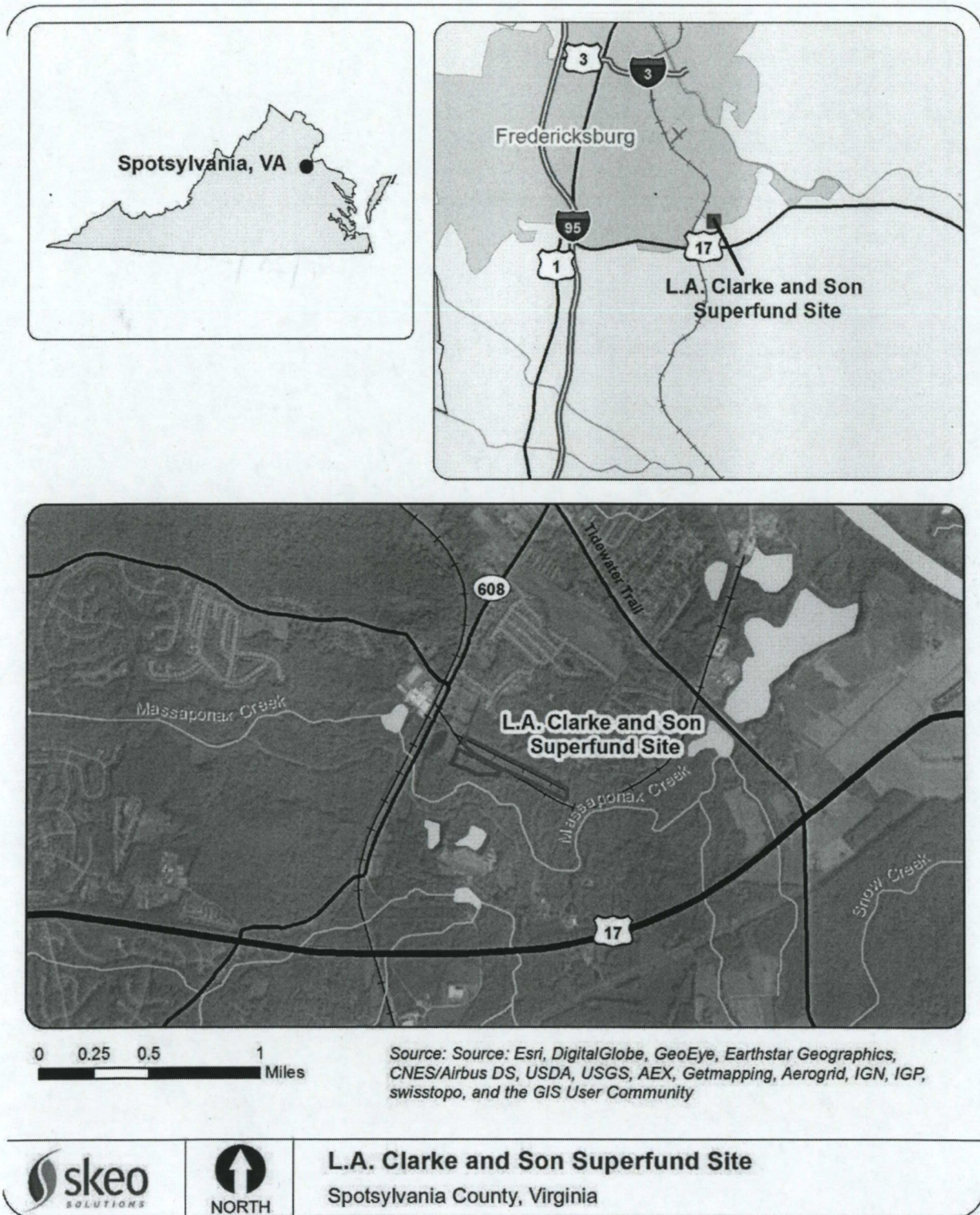
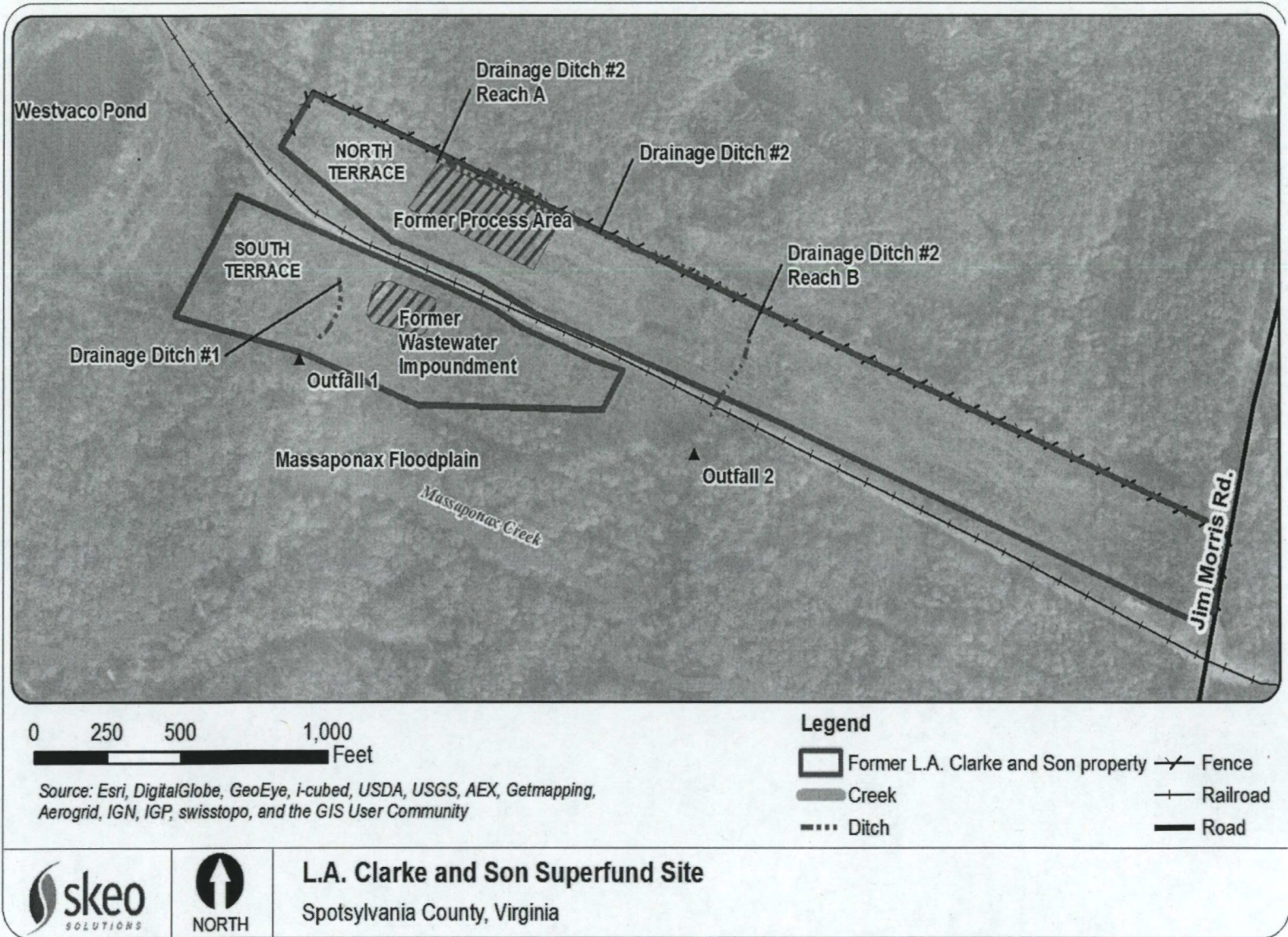


Figure 2



ATTACHMENT 1

Notice of Availability of Proposed ESD

Evidence of infidelities spreads in wake of hack

BY RAHMAEL SATTAR
ASSOCIATED PRESS

LONDON—Husbands and wives across the world are being confronted with their partners' extramarital affairs after a catastrophic leak at Ashley Madison proved electronic evidence of infidelity across the Internet.

Online forums were buzzing Thursday with users claiming to have found evidence that their significant others were on the dating site. In the United States, a religious ex-reality television star made a revealing apology after a media outlet found his financial data in the dump. In Britain and Israel, parliamentarians were put on the spot after their

CONGRESS, W.H. WORKERS AMONG SUBSCRIBERS

WASHINGTON—An Associated Press analysis of hacked data from the cheating website Ashley Madison shows that subscribers to the online service included hundreds of U.S. government civilian and military employees. Some had sensitive jobs in the White House, Congress and law enforcement agencies.

The AP's investigation found that subscribers included at least two assistant U.S. attorneys, an IT administrator in the Executive

Office of the President, a division chief, an investigator and a trial attorney in the Justice Department, a government hacker at the Homeland Security Department and another DHS employee who indicated he worked on a U.S. counterterrorism response team.

The AP traced their government Internet connections.

—The Associated Press

email addresses were located in the trove. And in Australia, one woman appeared to learn—live on air—that her husband's details were registered with the site.

Family law experts are divided on the likely offline impact of the leak, but for

Angeles-based divorce lawyer Steve Mindel predicted an uptick in business for him and his colleagues.

Ashley Madison marketed itself as the premier venue for cheating spouses before data stolen by hackers started spreading across the In-

ternet earlier this week. Late Thursday the same hackers released a second dump of information, whose content The Associated Press was not immediately able to determine.

The material previously released, pertaining to the site's 35 million or so registered members, has already drawn widespread attention.

Webvisitors devoted to checking emails against the leaked data appeared to be experiencing heavy traffic. Forums such as Reddit—the user-powered news and discussion site—carried stories of anguished husbands and wives confronting their partners after finding their data among the massive dump of information.

In the United States, the hack has drawn a public apology from Josh Duggar, the former star of "19 Kids and Counting," centered on the life of the large—and apparently wholesome—Duggar family. After news and gossip site Gawker said

it had found proof he paid for an account with Ashley Madison, Josh Duggar released a statement admitting he had cheated on his wife.

"I have been the biggest hypocrite ever," the statement said. Journalists are combing through the data, looking for the names of celebrities, top officials or religious leaders. Their task has been complicated by the fact that many of the profiles were tied to fake or borrowed email addresses, which users did not necessarily have to validate.

world briefs

FOUR KILLED BY BOMB IN SOUTH YEMEN CITY

SANAA, Yemen—A bomb attack in the governor's compound in the southern Yemeni port city of Aden on Thursday killed four people, security officials said. The governor and other officials who were present at the time were not hurt in the apparent assassination attempt.

The developments came as Shiite rebels known as Houthis launched new attacks, after weeks of retreating, as pro-government troops pushed north out of Aden.

Thursday's explosion in Gov. Nayef al-Bakri's office also wounded to people, local police officials said. Al-Bakri, who oversees the Aden governorate, was in the building at the time, meeting with high-profile military and security officials.

MEN CLAIM TO FIND LOST NAZI TRAIN IN POLAND

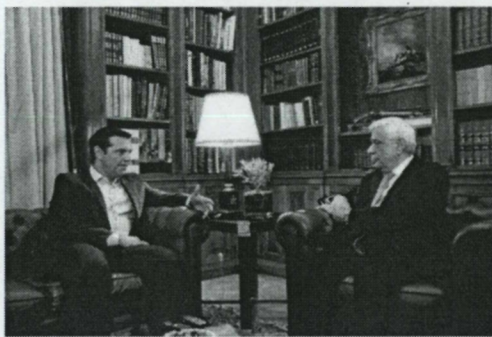
WARSAW, Poland—Two men in Poland claim they have found a legendary Nazi train that according to local lore was loaded with gold, gems and valuables and vanished into a system of secret tunnels as the Germans fled advancing Soviet forces at the end of World War II.

Historians say the existence of the train has never been conclusively proven, but authorities are not passing up this chance at possibly recovering treasures that have sparked the imaginations of local people for decades.

"We believe that a train has been found. We are taking this seriously," Marcin Tokarski, an official in the southwestern Polish district of Walbrzych said.

Already, the district governor has convened a meeting of firefighters, police and others to explore how they can safely handle the train if it is located. Not only could it be armed with explosives, but methane gas underground could add to the risk of an explosion.

—The Associated Press



Greek Prime Minister Alexis Tsipras (left) speaks with Greek President Prokopis Pavlopoulos, during their meeting in Athens, where he announced his resignation.

Greek prime minister resigns

ALEXIS TSIPRAS CALLED EARLY ELECTIONS IN AN ATTEMPT TO IMPLEMENT THREE-YEAR BALLOUT

BY ELENA BECATOROS
AND NICHOLAS RAPHITIS
ASSOCIATED PRESS

ATHENS, Greece—Greek Prime Minister Alexis Tsipras resigned Thursday and called early elections, an attempt to get a new, stronger mandate to implement a three-year bailout program that sparked a rebellion within his radical left party.

In a televised address to the nation, Tsipras said his government had gotten the best deal possible for the country when it agreed to a \$95 billion bailout from other eurozone countries.

The rescue was all that kept Greece from a disastrous exit from the euro but came with strict terms to cut spending and raise taxes—the very measures Tsipras had pledged to fight when he won elections in January.

His U-turn in accepting the demands by the country's creditors led to outrage among hard-liners in his

Syriza party, with dozens voting against him during the bailout's ratification in parliament last week, which was approved thanks to support from opposition parties.

Tsipras has insisted that although he disagrees with the conditions of the bailout terms, he had no choice but to accept and implement them to keep Greece in the euro, which the vast majority of Greeks want.

With the country's finances now secured, Tsipras said he felt obliged to let the Greek people evaluate his work.

"Now that this difficult cycle has ended... I feel the deep moral and political obligation to set before your judgment everything I have done, both right and wrong, the achievements and the omissions," he said in the address.

The popular mandate I received on Jan. 25 has exhausted its limits."

Tsipras formally submitted his resignation to the country's president, Prokopis Pavlopoulos, to begin the election process. This will involve letting the two main

opposition parties—the conservative New Democracy and the Nazi-inspired Golden Dawn—try to form a government. Each party can spend up to three days trying to do so, and New Democracy leader Evangelos Meimarakis said he will use his available time. Neither party, however, is expected to have the support in parliament to be able to form a government.

Tsipras did not mention a date for the election, although it will have to be held within the next month, with government officials saying Sept. 20 is the likeliest date.

The European Union's executive Commission said it "takes note" of the election announcement. "Broad support for (bailout deal) and sticking to commitments will be key for success," spokeswoman Annika Brendthardt said in a tweet.

Tsipras had delayed a decision on whether to call new elections until after Greece received the first installment from the bailout and made a debt repayment to the European Central Bank, both of which it did Thursday.

nation briefs

WILDFIRES CLAIM THE LIVES OF THREE MORE FIREFIGHTERS

TWISP, Wash.—The deaths of three firefighters who were overrun by flames after their vehicle crashed cast a pall in Washington state on Thursday, with the governor saying the "unprecedented carnage" of wildfires has "burned a big hole in our state's heart."

Authorities said they were investigating exactly how the tragedy occurred Wednesday night. It brought to 11 the number of firefighters killed across the West this year during one of the driest and most explosive wildfire seasons on record.

The deaths happened in the scenic Methow River valley about 115 miles northeast of Seattle, where a series of blazes covering close to 140 square miles had merged. The firefighters' vehicle crashed and was overtaken by flames, authorities said.

Four firefighters who were not in the vehicle but were in the same area were injured, one critically, authorities said.

PRISON ESCAPEE ARRAIGNED ON CHARGES IN N.Y.

PLATTSBURGH, N.Y.—A convicted killer who escaped from a maximum-security prison and spent more than three weeks on the run was arraigned Thursday on criminal charges stemming from the daring breakout.

A judge entered a not-guilty plea for David Sweat on two felony counts of first-degree escape and a felony count of promoting prison contraband for possessing hacksaw blades.

Sweat escaped June 6 from Clinton Correctional Facility with fellow inmate Richard Matt, also a convicted killer. Matt was shot dead June 26, and Sweat was shot and captured two days later, ending a 23-day manhunt.

Each of the charges carries a sentence of up to seven years in prison. Sweat, 38, is already serving life without parole for the killing of a sheriff's deputy. Matt, 46, was doing 25 years to life for the kidnapping and homicide dismemberment of his former boss.

PROTESTS IN ST. LOUIS AFTER 18-YEAR-OLD SHOT BY POLICE

ST. LOUIS—Officers arrested at least nine people and deployed tear gas amid protests in St. Louis over the death of a black 18-year-old who was fatally shot by police after he pointed a gun at them, the city's police chief said.

Chief Sam Dotson said at a news conference late Wednesday that a group of protesters who had blocked an intersection threw glass bottles and bricks at officers and refused orders to clear the roadway. Police initially deployed smoke canisters in hopes of dispersing the crowd but later resorted to tear gas, Dotson said. Those arrested face charges of impeding the flow of traffic and violating curfew.

A vacant building and at least one car were burned. The demonstration was one of several Wednesday after the killing of Mounir Ball-Bey of St. Louis. Tensions were already high after violence erupted during events marking the anniversary of the death of Michael Brown, the 18-year-old fatally shot last year by a police officer in nearby Ferguson.

—The Associated Press

Car bomb hits security building, wounds 29

BY BRIAN ROMAN
ASSOCIATED PRESS

CAIRO—A massive car bomb claimed by Islamic State militants ripped into a national security building in a residential neighborhood in Cairo early Thursday, wounding at least 29 people and blowing the facades off nearby buildings.

The blast, which went off around 2 a.m., demolished a wall in front of the government building, smashed its structure and left gaping holes exposing its offices. Of those hurt, 11 were police and soldiers. No deaths were reported.

Authorities said high-powered explosives were used in the blast, which was heard and felt across the city. Glass from blown-out



Egyptian officers stand watching atop the damaged national security building after a bomb exploded early Thursday.

windows littered the surrounding streets in the Shubra el-Kheima neighborhood, at the northern entrance to the capital. Security

forces with assault rifles set up roadblocks to ward off hysterical residents and onlookers. A crater marked the blast's apparent position,

while the engine of the car apparently used in the attack landed on other side of the street.

The Islamic State group claimed responsibility for the car bombing, saying on its Al-Bayan radio station that "soldiers of the caliphate" had carried it out. A statement issued by their affiliate in Egypt and circulated by supporters online said it was to avenge the execution of six convicted militants in May.

The men were sentenced by a military court in proceedings heavily criticized by human rights organizations, some of whom pointed out that three of the defendants were already in detention when they allegedly carried out attacks.

Changes Proposed for the L.A. Clarke and Sons Superfund Site, Spotsylvania County, VA

Written comments on the ESD proposal must be post-marked by midnight, September 21, 2015, and sent to:

Chris Matta, Remedial Project Manager
USEPA Region 2, 1650 Arch St. (3822), Philadelphia, PA 19103
or email: chris.matta@epa.gov

The United States Environmental Protection Agency (EPA) is proposing changes to the March 31, 1986 Record of Decision (ROD) for Industrial Lane Superfund Site. EPA welcomes the public's comments on these proposed changes.

Explanation of Significant Difference (ESD)

This Explanation of Significant Differences (ESD) modifies the remedy originally selected for the L.A. Clarke and Son Site by: 1) changing the human health cleanup level for surface soil and eliminating the requirement for a soil cover, 2) instituting an ecological cleanup level for surface soil, 3) ensuring Institutional Controls (ICs) necessary for long-term protectiveness are implemented through a covenant under Virginia's Uniform Environmental Covenants Act, rather than deed restrictions that were called for under the 1986 Record of Decision (ROD) and, 4) clarifies the requirement to address site security through fencing and signage to limit access and warn the public as a component of the selected remedy.

These modifications are significant but do not fundamentally alter the basic features of the ROD's remedy with respect to scope, performance, or cost.

To review the draft ESD or other information about the site, go to: www.epa.gov/arweb

OR VISIT:

Central Appalachia Regional Library-Snow Branch
8740 Courthouse Rd. Spotsylvania, VA 22551
Contact Shelly Gravel at 540-507-7565

OR (BY APPOINTMENT):

US EPA Library: 1650 Arch St., Philadelphia, PA 19103
Contact: Paul Van Reed, Superfund Records Manager: 215-814-3157. For Additional information, visit EPA's L.A. Clarke and Sons Superfund Site webpage, at <http://epa.gov/reg3/usc/superfund/LA000797242/index.htm>

OR CONTACT:

Vance Evans, EPA Community Involvement Coordinator
(215) 814-9526, email: evans.vance@epa.gov

ATTACHMENT 2

State Concurrence



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

September 22, 2015

Mr. Christian Matta (3HS23)
EPA Remedial Project Manager
1650 Arch Street
Philadelphia, PA 19103-2029

RE: L.A. Clarke Superfund Site
Fourth Explanation of Significant Difference

Dear Mr. Matta:

The Virginia Department of Environmental Quality has completed its review of the **Fourth Explanation of Significant Difference for the L.A. Clarke and Son Superfund Site**. This ESD revises the surface soils cleanup levels (human health and ecological); revises the institutional controls (ICs) necessary to ensure long-term protectiveness at the site; clarifies the requirement to address site security through fencing and signage to limit access and warn the public as a component of the selected remedy; and eliminates the requirement for a soil cover. We concur with the requirements of the above referenced document.

The DEQ appreciates the opportunity to comment and participate in this Superfund Project. If you have any questions, please contact Angie McGarvey, DEQ's Remediation Project Manager for the L.A. Clarke Superfund Site, at 804-698-4084 or at angela.mcgarvey@deq.virginia.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris M. Evans".

Chris M. Evans
Director, Office of Remediation Programs

CC: Angie McGarvey (DEQ)
File